

**In accordance with 37 CFR 1.121(c)(1)(ii) a marked-up version of the foregoing amended sections of the specification, showing all amendatory matter, is provided as an Attachment to this Response.**

**REMARKS**

Claims 1-30 are pending in the application.

Claims 1-30 were rejected.

**I.     Objection to Specification**

The specification was objected to because of an informality, specifically missing serial numbers for referenced related patent applications. Applicants have amended the specification to address that objection; however, it is noted that the serial numbers for two of the referenced related patent applications were not available in time to supply them with this response. Applicants are in the process of obtaining those serial numbers and will provide them to the Examiner as soon as they are available. The specification has also been amended to correct typographical errors discovered subsequent to the filing of the application.

**II.    35 U.S.C. §102 Claim Rejections**

In the Office Action, claims 1-13 and 15-30 were rejected under 35 USC §102(e) as being anticipated by Koraitim (U.S. Patent No. 6,370,117). Applicants respectfully traverse that rejection and request reconsideration by the Examiner.

The invention disclosed and claimed in this application is directed to an improved methodology for transmission of high-speed data bursts in a wireless communication system, particularly a system based on CDMA modulation and coding. As Applicants describe in the Specification, data transmission in a wireless communication system is conventionally sent in bursts, with the burst duration determined in respect to a fill level of an input buffer. However, as

Applicants also explained, it is not uncommon for additional data packets from the same the user to become available in the input buffer prior to the ending of the data burst duration. It would, as Applicants teach, increase transmission efficiency if those later-arriving data packets from the common user could be included in the currently active data burst (which is not possible with methods of the prior art). To that end, the invention provides a methodology for accommodating later-arriving data packets by assigning a burst duration time that is larger than necessary to transmit the data available in the buffer at the sampling time. Thus, as additional data packets for the user enter the input data buffer, they can be accommodated in the presently active data burst. To avoid unnecessarily wasting transmission resources in the event that such additional data packets do not become available in the input data buffer, the invention also provides a methodology for early termination of the extended data burst duration.

The teaching of Koraitim is directed to an entirely different idea. Specifically, Koraitim is directed to a methodology for allocating timeslots in a TDMA communication system between one set of users requiring a fixed channel resource for the duration of a call (constant bit rate, or CBR) and another set of users whose traffic is generated in periodic increments, or bursts (variable bit rate, or VBR). It is noted that the methodology of Koraitim adjusts the number of timeslots in a TDMA frame allocated to CBR traffic (and indirectly to VBR traffic) as a function of the proportion of each type of traffic in an input buffer, but respectfully suggested that such a teaching hardly represents a correspondence or anticipation of the methodology of the invention here.

20 Moreover, while the VBR traffic of Koraitim may well be constituted as data bursts, nothing in the teaching of Koraitim could realistically be construed to show or suggest a variation in data burst duration for any given user, such as carried out by the method of the invention. Rather, Koraitim clearly contemplates the assignment of one, and only one TDMA slot per user, and its allocation

methodology simply determines how many such timeslots will be allocated to a given user group at a particular time -- *i.e.*, there is no adaptation in Koraitim of data burst duration for a particular user in respect to the content of that user's input data message. Indeed, there is no teaching in Koraitim of any user specific activity or action.

Each of Applicants' independent claims includes one or more limitations directed to a variation in data burst duration for a given input data message, and the annexation of additional data packets for that input data message within such a variable duration burst. There being no teaching in Koraitim of any such idea, Applicants respectfully submit that Koraitim cannot stand as an anticipation of their claimed invention. Withdrawal of the rejection of Applicants' claims as being anticipated by Koraitim is accordingly respectfully requested.

### **III. 35 U.S.C. §103 Claim Rejections**

Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over Koraitim. Applicants note that claim 14 depends from independent claim 1, which has been shown above to be patentable over that reference. Accordingly, dependent claim 14 must also be patentable. Withdrawal of the §103 rejection as to claim 14 is accordingly requested.

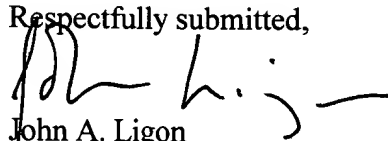
### **IV. Conclusion**

Having addressed the Examiner's rejection bases herein, it is believed that, in view of the preceding remarks, this application now stands in condition for allowance. Such allowance is respectfully requested.

Please address all correspondence to John A. Ligon, Law Office of John Ligon, P.O. Box 43485, Upper Montclair, NJ 07043. Telephone calls should be made to the undersigned at (973) 509-9192.

Please charge any fees due in respect to this amendment to Deposit Account No. 50-1944.

Respectfully submitted,



John A. Ligon

Reg. No. 35,938

Attorney for Applicant

Dated: October 29, 2002

LAW OFFICE OF JOHN LIGON

PO BOX 43485

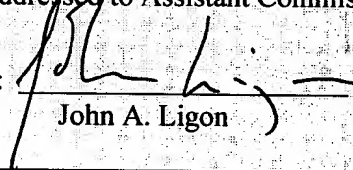
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I hereby certify that this Response to Office Action is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on October 29, 2002.

By:



John A. Ligon



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**ATTACHMENT**

**Amended Portion of Specification Marked To Show Amendatory Matter**

At Page 1, please replace the paragraph headed by "Related Applications" with the following:

-- The present invention is related to U.S. Patent Application No. 09/288, [ ], filed concurrently herewith, entitled INTELLIGENT BURST CONTROL FUNCTIONS FOR WIRELESS COMMUNICATION SYSTEMS, U.S. Patent Application No. 09/288,365 [ ], entitled METHOD FOR PREMATURE TERMINATION OF BURST TRANSMISSION IN WIRELESS COMMUNICATION SYSTEMS filed concurrently herewith, U.S. Patent Application No 09/288,363 [ ], entitled SYSTEM AND METHOD FOR PREVENTION OF REVERSE JAMMING DUE TO LINK IMBALANCE IN WIRELESS COMMUNICATION SYSTEMS, filed concurrently herewith, U.S. Patent Application No 09/288, [ ], entitled BURST DURATION ASSIGNMENT BASED ON FADING FLUCTUATION AND MOBILITY IN WIRELESS COMMUNICATION SYSTEMS filed concurrently herewith, U.S. Patent Application 09/288,368 [ ], entitled A METHOD OF QUEUE LENGTH BASED BURST MANAGEMENT IN WIRELESS COMMUNICATION SYSTEMS, filed concurrently herewith, all of which are assigned to the same assignee and are incorporated by reference herein. --

Please replace the paragraph beginning at page 9, line 19 and ending at page 10, line 18 with the following:

-- In high speed burst transmission arrangements, typically the user's data message is accumulated in data buffer **200** for a finite period of time, the data being thereby collected into a single package for transmission as a single data burst. Figure 3 illustrates a high speed burst transmission arrangement in which a data message is accumulated, collected and transmitted in bursts. Referring to the data message illustrated in Figure 2, and repeated in the subsequent Figures 3 through 7 for reference, the data message is composed of data packets **210** entered into data buffer **200**. In the example illustrated in the combination of Figures 2 and 3, data within data buffer **200** is collected and transmitted as a signal burst at three sampling times,  $T_1$ ,  $T_2$  and  $T_3$ . The time between  $T_1$

and  $T_2$  and between  $T_2$  and  $T_3$  is longer than the rate at which data packets **210** are entering data buffer **200** and a large number of data packets are collected during these periods. The first data burst **320**, taken at sample time  $T_1$ , is composed of data packets **210a** through **210m** [**210n**]. The second burst **330**, taken at sample time  $T_2$ , is composed of data packets **210n** [**210m**] through **210r** [**210s**] and the third burst **340**, taken at sample time  $T_3$ , is composed of data packets **210s** [**210r**] through **210y**. The data bursts are constructed in this form because data packet **210n**, although time sequential with regard to data packet **210m**, is not available in data buffer **200** at sample time  $T_1$  and cannot be included in burst **320**. Similarly, at sample time  $T_2$ , data packet **210s** is not available in data buffer **200** and cannot be included in data burst **330**. The transmissions of data packets **210n** through **210r** and data packets **210s** through **210y** are thus postponed until sample times  $T_2$  and  $T_3$  respectively, even though these packets are sequential in time and no time gap exists between the data packets. --